

# **EXHIBIT B**

Filing Date: October 29, 2003

Inventor(s): Stanley N. COHEN et al.

U.S. Application Serial No.: 10/697,720

Title: Mamalian Tumor Susceptibility Genes and Their Uses

Attorney Docket No.: 70017.002/USC2

Receipt is hereby acknowledged for the following in the U.S. Patent and Trademark Office:

☒ Transmittal Form

☒ Response to Notice to Comply With Sequence Disclosure Requirements

☒ Substitute Sequence Listing - Computer Readable Form (1 Diskette)

☒ Substitute Sequence Listing - Paper Copy (11 Sheets)

☒ Statement Under 37 CFR 1.821-1.825 (1 page, executed)

☒ Statement Under 37 CFR 1.821-1.825 (1 page, executed) Containing Nucleotide

☒ Notice to Comply With Requirements for Patent Applications Containing Nucleotide

☒ Sequence and/or Amino Acid Sequence Disclosures (return copy)

☒ Supplemental Preliminary Amendment

☒ Return Postcard

Due Date: June 11, 2006

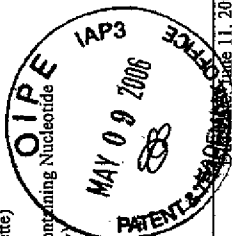
SBK/DGK/pjc - DC Office

Patent

303  
al.

# Sequence Disclosure Requirements

- ☒ substitute Sequence Listing - Paper Copy (11 Sheets)
- ☒ Statement Under 37 CFR 1.821-1.825 (1 page, executed)
- ☒ Notice to Comply With Requirements for Patent Applications Containing Nucleotide
- ☒ Sequence and/or Amino Acid Sequence Disclosures (return copy)
- ☒ Supplemental Preliminary Amendment
- ☒ Return Postcard



Patent

SBK/DGK/pjc - DC Office

June 11, 2006

# TRANSMITTAL FORM

(to be used on all correspondence after initial filing)

ATTORNEY DOCKET NO.

**70017.0027USC2**

U.S. APPLICATION SERIAL NO.

**10/697,720**

CONFIRMATION NO.

**3761**

FILING DATE

**October 29, 2003**

INVENTOR(S)

**Stanley N. COHEN et al.**

EXAMINER

**not yet assigned**

GROUP ART UNIT

**1642**

TITLE OF APPLICATION

**Mammalian Tumor Susceptibility Genes and Their Uses**

ADDRESS TO:

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

## ENCLOSURES

- ☒ Transmittal Form
- ☒ Response to Notice to Comply With Sequence Disclosure Requirements
- ☒ Substitute Sequence Listing - Paper Copy (11 Sheets)
- ☒ Substitute Sequence Listing - Computer Readable Form (1 Diskette)
- ☒ Statement Under 37 CFR 1.821-1.825 (1 page, executed)
- ☒ Notice to Comply With Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures (return copy)
- ☒ Supplemental Preliminary Amendment
- ☒ Return Postcard

☒ Please charge Deposit Account No. 13-2725 in the amount of \$0.00 to cover any required fees. In the event any variance exists between this amount and the Patent Office charges for filing the above-noted documents, including any fees required under 35 CFR 1.136 for any necessary extension of time to make the filing of the attached documents timely, please charge or credit the difference to Deposit Account No. 13-2725. Further, if these papers are not considered timely filed, then a request is hereby made under 37 CFR 1.136 for the necessary extension of time.

## CORRESPONDENCE ADDRESS

☒ The address associated with Customer Number: **23552** OR ☐ the correspondence address below.


Name

Address

City

State

Zip Code

NAME	Steven B. Kelber	REGISTRATION NO.	30,073
SIGNATURE		DATE	May 9, 2006
NAME	Dawn Gardner Krosnick	REGISTRATION NO.	44,118
TELEPHONE	202 326-0300		

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

<b>RESPONSE TO NOTICE TO COMPLY WITH SEQUENCE DISCLOSURE REQUIREMENTS</b>		ATTORNEY DOCKET NO. <b>70017.0027USC2</b>	
		U.S. APPLICATION SERIAL NO. <b>10/697,720</b>	CONF. NO. <b>3761</b>
		FILING DATE <b>October 29, 2003</b>	
INVENTOR(S) <b>Stanley N. COHEN et al.</b>	EXAMINER (if known) <b>not yet assigned</b>	ART UNIT (if known) <b>1642</b>	
TITLE OF APPLICATION <b>Mammalian Tumor Susceptibility Genes and Their Uses</b>			

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

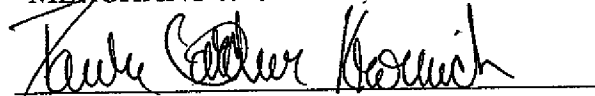
Dear Sir:

Responsive to the notification dated April 11, 2006, and in accordance with the provisions of 37 C.F.R. 1.821-1.825, Applicants submit herewith a Substitute Sequence Listing (paper copy), a copy of the sequence listing in computer readable form on diskette, and a statement under 37 C.F.R. §1.821 - 1.825.

In view of the foregoing, this application is deemed to be in proper condition for examination on the merits and such favorable action is earnestly solicited.

Respectfully submitted,

MERCHANT & GOULD, P.C.



Steven B. Kelber  
Registration No. 30,073

May 9, 2006

Date

P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
Telephone No. (202) 326-0300  
Facsimile No. (202) 326-0778

Dawn Gardner Krosnick  
Registration No. 44,118

**23552**

Patent & Trademark Office

# SEQUENCE LISTING

<110> Cohen, Stanley N.  
Li, Limin

<120> MAMMALIAN TUMOR SUSCEPTIBILITY GENES AND THEIR USES

<130> 70017.27USC2

<140> US 10/697,720

<141> 2003-10-29

<150> US 09/804,690

<151> 2001-03-12

<150> US 09/146,187

<151> 1998-09-01

<150> US 08/977,818

<151> 1997-11-25

<150> US 08/670,274

<151> 1996-06-13

<150> US 08/585,758

<151> 1996-01-16

<150> US 60/006,856

<151> 1995-11-16

<160> 20

<170> PatentIn version 3.3

<210> 1

<211> 1448

<212> DNA

<213> Artificial Sequence

<220>

<223> TSG101 nucleotide

<220>

<221> CDS

<222> (61)..(1203)

<400> 1

cccctctgcc tgtggggacg gaggagcgcg ccatggctgt ccgagagtca gctgaagaag 60

atg atg tcc aag tac aaa tat aga gat cta acc gtc cgt caa act gtc 108

Met Met Ser Lys Tyr Lys Tyr Arg Asp Leu Thr Val Arg Gln Thr Val

1 5 10 15

aat gtc atc gct atg tac aaa gat ctc aaa cct gta ttg gat tca tat 156

Asn Val Ile Ala Met Tyr Lys Asp Leu Lys Pro Val Leu Asp Ser Tyr

20 25 30

gtt ttt aat gat ggc agt tcc agg gag ctg gtg aac ctc act ggt aca 204

Val Phe Asn Asp Gly Ser Ser Arg Glu Leu Val Asn Leu Thr Gly Thr

35	40	45	
atc cca gtg cgt tat cga ggt aat ata tat aat att cca ata tgc ctg Ile Pro Val Arg Tyr Arg Gly Asn Ile Tyr Asn Ile Pro Ile Cys Leu 50 55 60			252
tgg ctg ctg gac aca tac cca tat aac ccc cct atc tgt ttt gtt aag Trp Leu Leu Asp Thr Tyr Pro Tyr Asn Pro Pro Ile Cys Phe Val Lys 65 70 75 80			300
cct act agt tca atg act att aaa aca gga aag cat gtg gat gca aat Pro Thr Ser Ser Met Thr Ile Lys Thr Gly Lys His Val Asp Ala Asn 85 90 95			348
ggg aaa atc tac cta cct tat cta cat gac tgg aaa cat cca cgg tca Gly Lys Ile Tyr Leu Pro Tyr Leu His Asp Trp Lys His Pro Arg Ser 100 105 110			396
gag ttg ctg gag ctt att caa atc atg att gtg ata ttt gga gag gag Glu Leu Leu Glu Leu Ile Gln Ile Met Ile Val Ile Phe Gly Glu Glu 115 120 125			444
cct cca gtg ttc tcc cgg cct act gtt tct gca tcc tac cca cca tac Pro Pro Val Phe Ser Arg Pro Thr Val Ser Ala Ser Tyr Pro Pro Tyr 130 135 140			492
aca gca aca ggg cca cca aat acc tcc tac atg cca ggc atg cca agt Thr Ala Thr Gly Pro Pro Asn Thr Ser Tyr Met Pro Gly Met Pro Ser 145 150 155 160			540
gga atc tct gca tat cca tct gga tac cct ccc aac ccc agt ggt tat Gly Ile Ser Ala Tyr Pro Ser Gly Tyr Pro Pro Asn Pro Ser Gly Tyr 165 170 175			588
cct ggc tgt cct tac cca cct gct ggc cca tac cct gcc aca aca agc Pro Gly Cys Pro Tyr Pro Pro Ala Gly Pro Tyr Pro Ala Thr Thr Ser 180 185 190			636
tca cag tac cct tcc cag cct cct gtg acc act gtt ggt ccc agc aga Ser Gln Tyr Pro Ser Gln Pro Pro Val Thr Thr Val Gly Pro Ser Arg 195 200 205			684
gat ggc aca atc agt gag gac act atc cgt gca tct ctc atc tca gca Asp Gly Thr Ile Ser Glu Asp Thr Ile Arg Ala Ser Leu Ile Ser Ala 210 215 220			732
gtc agt gac aaa ctg aga tgg cgg atg aag gag gaa atg gat ggt gcc Val Ser Asp Lys Leu Arg Trp Arg Met Lys Glu Glu Met Asp Gly Ala 225 230 235 240			780
cag gca gag ctt aat gcc ttg aaa cga aca gag gaa gat ctg aaa aaa Gln Ala Glu Leu Asn Ala Leu Lys Arg Thr Glu Glu Asp Leu Lys Lys 245 250 255			828
ggc cac cag aaa ctg gaa gag atg gtc acc cgc tta gat caa gaa gta Gly His Gln Lys Leu Glu Glu Met Val Thr Arg Leu Asp Gln Glu Val 260 265 270			876
gct gaa gtt gat aaa aac ata gaa ctt ttg aaa aag aag gat gaa gaa Ala Glu Val Asp Lys Asn Ile Glu Leu Leu Lys Lys Lys Asp Glu Glu 280 285 290 295 300			924

275	280	285	
cta agt tct gct ctg gag aaa atg gaa aat caa tct gaa aat aat gat			972
Leu Ser Ser Ala Leu Glu Lys Met Glu Asn Gln Ser Glu Asn Asn Asp			
290	295	300	
att gat gaa gtt atc att ccc aca gcc cca ctg tat aaa cag att cta			1020
Ile Asp Glu Val Ile Ile Pro Thr Ala Pro Leu Tyr Lys Gln Ile Leu			
305	310	315	320
aat ctg tat gca gag gaa aat gct att gaa gac act atc ttt tac ctt			1068
Asn Leu Tyr Ala Glu Glu Asn Ala Ile Glu Asp Thr Ile Phe Tyr Leu			
325	330	335	
gga gaa gct ttg cgg cgg gga gtc ata gac ctg gat gtg ttc ctg aaa			1116
Gly Glu Ala Leu Arg Arg Gly Val Ile Asp Leu Asp Val Phe Leu Lys			
340	345	350	
cac gtc cgc ctc ctg tcc cgt aaa cag ttc cag cta agg gca cta atg			1164
His Val Arg Leu Leu Ser Arg Lys Gln Phe Gln Leu Arg Ala Leu Met			
355	360	365	
caa aag gca agg aag act gcg ggc ctt agt gac ctc tac tgacatgtgc			1213
Gln Lys Ala Arg Lys Thr Ala Gly Leu Ser Asp Leu Tyr			
370	375	380	
tgtcagctgg agaccgacct ctccgtaaag cattcttttc ttctttctttt tctcatcagt			1273
agaaccacaca ataagttatt gcagtttatc attcaagtgt taaatatttt gaatcaataa			1333
tatatatttct gtttcctttg ggtaaaaact ggcttttatt aatgcacttt ctaccctctg			1393
taagcgtctg tgctgtgctg ggactgactg ggctaaataa aatttggtgc ataaa			1448
<210>	2		
<211>	381		
<212>	PRT		
<213>	Artificial Sequence		
<220>			
<223>	TSG101 amino acid		
<400>	2		
Met Met Ser Lys Tyr Lys Tyr Arg Asp Leu Thr Val Arg Gln Thr Val			
1	5	10	15
Asn Val Ile Ala Met Tyr Lys Asp Leu Lys Pro Val Leu Asp Ser Tyr			
20	25	30	
Val Phe Asn Asp Gly Ser Ser Arg Glu Leu Val Asn Leu Thr Gly Thr			
35	40	45	
Ile Pro Val Arg Tyr Arg Gly Asn Ile Tyr Asn Ile Pro Ile Cys Leu			
50	55	60	

Trp Leu Leu Asp Thr Tyr Pro Tyr Asn Pro Pro Ile Cys Phe Val Lys  
 65 70 75 80

Pro Thr Ser Ser Met Thr Ile Lys Thr Gly Lys His Val Asp Ala Asn  
 85 90 95

Gly Lys Ile Tyr Leu Pro Tyr Leu His Asp Trp Lys His Pro Arg Ser  
 100 105 110

Glu Leu Leu Glu Leu Ile Gln Ile Met Ile Val Ile Phe Gly Glu Glu  
 115 120 125

Pro Pro Val Phe Ser Arg Pro Thr Val Ser Ala Ser Tyr Pro Pro Tyr  
 130 135 140

Thr Ala Thr Gly Pro Pro Asn Thr Ser Tyr Met Pro Gly Met Pro Ser  
 145 150 155 160

Gly Ile Ser Ala Tyr Pro Ser Gly Tyr Pro Pro Asn Pro Ser Gly Tyr  
 165 170 175

Pro Gly Cys Pro Tyr Pro Pro Ala Gly Pro Tyr Pro Ala Thr Thr Ser  
 180 185 190

Ser Gln Tyr Pro Ser Gln Pro Pro Val Thr Thr Val Gly Pro Ser Arg  
 195 200 205

Asp Gly Thr Ile Ser Glu Asp Thr Ile Arg Ala Ser Leu Ile Ser Ala  
 210 215 220

Val Ser Asp Lys Leu Arg Trp Arg Met Lys Glu Glu Met Asp Gly Ala  
 225 230 235 240

Gln Ala Glu Leu Asn Ala Leu Lys Arg Thr Glu Glu Asp Leu Lys Lys  
 245 250 255

Gly His Gln Lys Leu Glu Glu Met Val Thr Arg Leu Asp Gln Glu Val  
 260 265 270

Ala Glu Val Asp Lys Asn Ile Glu Leu Leu Lys Lys Lys Asp Glu Glu  
 275 280 285

Leu Ser Ser Ala Leu Glu Lys Met Glu Asn Gln Ser Glu Asn Asn Asp  
 290 295 300



Ile Asp Glu Val Ile Ile Pro Thr Ala Pro Leu Tyr Lys Gln Ile Leu  
 305 310 315 320

Asn Leu Tyr Ala Glu Glu Asn Ala Ile Glu Asp Thr Ile Phe Tyr Leu  
 325 330 335

Gly Glu Ala Leu Arg Arg Gly Val Ile Asp Leu Asp Val Phe Leu Lys  
 340 345 350

His Val Arg Leu Leu Ser Arg Lys Gln Phe Gln Leu Arg Ala Leu Met  
 355 360 365

Gln Lys Ala Arg Lys Thr Ala Gly Leu Ser Asp Leu Tyr  
 370 375 380

<210> 3  
 <211> 1494  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primer

<400> 3  
 gaaggggtgtg cgattgtgtg ggacgggtctg gggcagccca gcagcgggtg accctctgcc 60  
 tgcggggaag ggagtcgcca ggcggccgtc atggcgggtg cggagagcca gctcaagaaa 120  
 atggtgtcca agtacaaata cagagacctt actgtacgtg aaactgtcaa tgttattact 180  
 ctatacaaag atctcaaacc tgttttggat tcatatgttt ttaacgatgg cagttccagg 240  
 gaactaatga acctcactgg aacaatccct gtgccttata gaggttaatac atacaatatt 300  
 ccaatatgcc tatggctact ggacacatac ccatataatc cccctatctg ttttggttaag 360  
 cctactagtt caatgactat taaaacagga aagcatgttg atgcaaattg gaagatatat 420  
 cttccttatac tacatgaatg gaaacaccca cagtcagact tgttgggggt tattcaggtc 480  
 atgattgtgg tatttgagaga tgaacctcca gtcttctctc gtcttatttc ggcatactat 540  
 ccgccatacc aggcaacggg gccaccaaact acttcctaca tgccaggcat gccagggtga 600  
 atctctccat acccatccgg atacctccc aatcccagtg gttacccagg ctgtccttac 660  
 ccacctggtg gtccatatcc tgccacaaca agttctcagt acccttctca gcctcctgtg 720  
 accactgttg gtcccagtag ggatggcaca atcagcaggg acaccatccg agcctctctc 780  
 atctctgcgg tcagtgacaa actgagatgg cggatgaagg aggaaatgga tcgtgcccag 840  
 gcagagctca atgccttgaa acgaacagaa gaagacctga aaaagggtca ccagaaactg 900

gaagagatgg ttacccgttt agatcaagaa gtagccgagg ttgataaaaa catagaactt 960  
 ttgaaaaaga aggatgaaga actcagttct gctctggaaa aaatggaaaa tcagtctgaa 1020  
 aacaatgata togatgaagt tatcattccc acagctccct tatacaaaca gatcctgaat 1080  
 ctgtatgcag aagaaaacgc tattgaagac actatctttt acttgggaga agccttgaga 1140  
 aggggcgtag tagacctgga tgtcttcttg aagcatgtac gtcttctgtc ccgtaaacag 1200  
 ttccagctga gggcactaat gcaaaaagca agaaagactg ccggtctcag tgacctctac 1260  
 tgacttctct gataccagct ggagggttgag ctcttcttaa agtattcttc tcttctttt 1320  
 atcagtaggt gccagaata agttattgca gtttatcatt caagtgtaaa atattttgaa 1380  
 tcaataatat attttctggt ttcttttggg aaagactggc ttttattaat gcactttcta 1440  
 tcctctgtaa actttttgtg ctgaatgttg ggactgctaa ataaaatttg tttt 1494

<210> 4  
 <211> 390  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Primer

<400> 4

Met Ala Val Ser Glu Ser Gln Leu Lys Lys Met Val Ser Lys Tyr Lys  
 1 5 10 15

Tyr Arg Asp Leu Thr Val Arg Glu Thr Val Asn Val Ile Thr Leu Tyr  
 20 25 30

Lys Asp Leu Lys Pro Val Leu Asp Ser Tyr Val Phe Asn Asp Gly Ser  
 35 40 45

Ser Arg Glu Leu Met Asn Leu Thr Gly Thr Ile Pro Val Pro Tyr Arg  
 50 55 60

Gly Asn Thr Tyr Asn Ile Pro Ile Cys Leu Trp Leu Leu Asp Thr Tyr  
 65 70 75 80

Pro Tyr Asn Pro Pro Ile Cys Phe Val Lys Pro Thr Ser Ser Met Thr  
 85 90 95

Ile Lys Thr Gly Lys His Val Asp Ala Asn Gly Lys Ile Tyr Leu Pro  
 100 105 110

Tyr Leu His Glu Trp Lys His Pro Gln Ser Asp Leu Leu Gly Leu Ile

115	120	125
Gln Val Met Ile Val Val Phe Gly Asp Glu Pro Pro Val Phe Ser Arg 130 135 140		
Pro Ile Ser Ala Ser Tyr Pro Pro Tyr Gln Ala Thr Gly Pro Pro Asn 145 150 155 160		
Thr Ser Tyr Met Pro Gly Met Pro Gly Gly Ile Ser Pro Tyr Pro Ser 165 170 175		
Gly Tyr Pro Pro Asn Pro Ser Gly Tyr Pro Gly Cys Pro Tyr Pro Pro 180 185 190		
Gly Gly Pro Tyr Pro Ala Thr Thr Ser Ser Gln Tyr Pro Ser Gln Pro 195 200 205		
Pro Val Thr Thr Val Gly Pro Ser Arg Asp Gly Thr Ile Ser Glu Asp 210 215 220		
Thr Ile Arg Ala Ser Leu Ile Ser Ala Val Ser Asp Lys Leu Arg Trp 225 230 235 240		
Arg Met Lys Glu Glu Met Asp Arg Ala Gln Ala Glu Leu Asn Ala Leu 245 250 255		
Lys Arg Thr Glu Glu Asp Leu Lys Lys Gly His Gln Lys Leu Glu Glu 260 265 270		
Met Val Thr Arg Leu Asp Gln Glu Val Ala Glu Val Asp Lys Asn Ile 275 280 285		
Glu Leu Leu Lys Lys Lys Asp Glu Glu Leu Ser Ser Ala Leu Glu Lys 290 295 300		
Met Glu Asn Gln Ser Glu Asn Asn Asp Ile Asp Glu Val Ile Ile Pro 305 310 315 320		
Thr Ala Pro Leu Tyr Lys Gln Ile Leu Asn Leu Tyr Ala Glu Glu Asn 325 330 335		
Ala Ile Glu Asp Thr Ile Phe Tyr Leu Gly Glu Ala Leu Arg Arg Gly 340 345 350		
Val Ile Asp Leu Asp Val Phe Leu Lys His Val Arg Leu Leu Ser Arg		

<211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer  
  
 <400> 9  
 ctgataccag ctggagggtg agctcttc 28  
  
  
 <210> 10  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer  
  
 <400> 10  
 atttagcagt cccaacattc agcacaaa 28  
  
  
 <210> 11  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer  
  
 <400> 11  
 gagaccgacc tctccgtaaa gcattctt 28  
  
  
 <210> 12  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer  
  
 <400> 12  
 tagcccagtc agtcccagca cagcacag 28  
  
  
 <210> 13  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Primer  
  
 <400> 13  
 atttagcagt cccaacattc agcacaaa 28  
  
  
 <210> 14

<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 14  
gtcttctggg tggcagtgat ggcac

25

<210> 15  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 15  
cgggtgtcgg agagccagct caagaaa

27

<210> 16  
<211> 28  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 16  
ccttaccac ctggtggtec atatacctg

28

<210> 17  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 17  
cctccagctg gtatcagaga agtcgt

26

<210> 18  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 18  
cacagtcaga cttggtgggg cttattc

27

<210> 19

<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 19

His Thr His Leu Ala Met Asx Asp Ala  
1 5

<210> 20  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Primer

<220>  
<221> VARIANT  
<222> (2)..(2)  
<223> Xaa is any amino acid

<400> 20

Phe Xaa Asn Gly Ala Leu Glx Cys Tyr Ser  
1 5 10

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

<b>STATEMENT UNDER 37 C.F.R. § 1.821-1.825</b>		ATTORNEY DOCKET NO. <b>70017.0027USC2</b>	
		U.S. APPLICATION SERIAL NO. <b>10/697,720</b>	CONFIRMATION NO. <b>3761</b>
		FILING DATE <b>October 29, 2003</b>	
INVENTOR(S) <b>Stanley N. COHEN et al.</b>		EXAMINER (If known) <b>not yet assigned</b>	ART UNIT (If known) <b>1642</b>
TITLE OF APPLICATION <b>Mammalian Tumor Susceptibility Genes and Their Uses</b>			

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I, Dawn Gardner Krosnick, declare as follows:

1. That, in accordance with 37 C.F.R. § 1.821(f), the contents of the paper copy of the substitute sequence listing submitted herewith is a true copy of the sequence listing recorded in computer readable form which is also submitted herewith; and

2. That, in accordance with 37 C.F.R. § 1.821(g), the submission filed herewith does not include new matter.

Respectfully submitted,

MERCHANT & GOULD, P.C.



Steven B. Kelber

Registration No. 30,073

May 9, 2006

Date

P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
Telephone No. (202) 326-0300  
Facsimile No. (202) 326-0778

Dawn Gardner Krosnick  
Registration No. 44,118

**23552**

Patent & Trademark Office



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/697,720	10/29/2003	Stanley N. Cohen	5398-027-27 CONT

CONFIRMATION NO. 3761

FORMALITIES  
 LETTER

23552  
 MERCHANT & GOULD PC  
 P.O. BOX 2903  
 MINNEAPOLIS, MN 55402-0903

Date Mailed: 04/11/2006

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS  
 CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE  
 DISCLOSURES**

*Filing Date Granted*

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

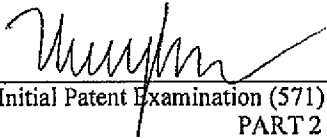
To Download Patentin Software, visit <http://www.uspto.gov/web/patents/software.htm>  
 For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)

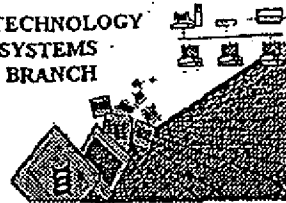
Replies should be mailed to: Mail Stop Missing Parts  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria VA 22313-1450

*A copy of this notice **MUST** be returned with the reply.*



A handwritten signature in dark ink, appearing to be 'Munich', is written over a horizontal line.

Office of Initial Patent Examination (571) 272-4000, or 1-800-PTO-9199, or 1-800-972-6382  
PART 2 - COPY TO BE RETURNED WITH RESPONSE



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/697,720  
Source: FTWO  
Date Processed by STIC: 7/6/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT  
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER  
VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND  
TRADEMARK OFFICE WEBSITE SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - cPAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):  
U.S. Patent and Trademark Office; 220.20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby,  
Room 1B03, Arlington, VA 22202

Revised 05/17/04



IFWO

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/697,720

DATE: 07/06/2004  
TIME: 11:03:58

Input Set : A:\5398-027-27CONT.ST25.txt  
Output Set: N:\CRF4\07062004\J697720.raw

3 <110> APPLICANT: Cohen, Stanley N.  
4 Li, Limin  
6 <120> TITLE OF INVENTION: Mammalian Tumor Susceptibility Genes and Their Uses  
8 <130> FILE REFERENCE: 5398-027-27CONT  
10 <140> CURRENT APPLICATION NUMBER: US 10/697,720  
11 <141> CURRENT FILING DATE: 2003-10-29  
13 <150> PRIOR APPLICATION NUMBER: US 09/804,690  
14 <151> PRIOR FILING DATE: 2001-03-12  
16 <150> PRIOR APPLICATION NUMBER: US 09/146,187  
17 <151> PRIOR FILING DATE: 1998-09-01  
19 <150> PRIOR APPLICATION NUMBER: US 08/977,818  
20 <151> PRIOR FILING DATE: 1997-11-25  
22 <150> PRIOR APPLICATION NUMBER: US 08/670,274  
23 <151> PRIOR FILING DATE: 1996-06-13  
25 <150> PRIOR APPLICATION NUMBER: US 08/585,758  
26 <151> PRIOR FILING DATE: 1996-01-16  
28 <150> PRIOR APPLICATION NUMBER: US 60/006,856  
29 <151> PRIOR FILING DATE: 1995-11-16  
31 <160> NUMBER OF SEQ ID NOS: 20  
33 <170> SOFTWARE: FastSEQ for Windows Version 4.0

Does Not Comply  
Corrected Diskette Needed

(pg. 1-2)

## ERRORED SEQUENCES

326 <210> SEQ ID NO: 7  
327 <211> LENGTH: 39  
328 <212> TYPE: RNA  
329 <213> ORGANISM: Artificial Sequence  
331 <220> FEATURE:  
332 <223> OTHER INFORMATION: primer  
334 <400> SEQUENCE: 7  
E--> 335 caucaucauc augagggggc ttaaggagtaac tttttccag 39  
337 <210> SEQ ID NO: 8  
338 <211> LENGTH: 39  
339 <212> TYPE: RNA  
340 <213> ORGANISM: Artificial Sequence  
342 <220> FEATURE:  
343 <223> OTHER INFORMATION: primer  
345 <400> SEQUENCE: 8  
E--> 346 cuacuacuac uacacdtttt gagcaagttc agccagggtt 39

No "Es" are allowed  
= in a RNA sequence.

Same error

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/697,720

DATE: 07/06/2004

TIME: 11:03:59

Input Set : A:\5398-027-27CONT.ST25.txt

Output Set: N:\CRF4\07062004\J697720.raw

L:43 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:46 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1  
 L:335 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:10  
 L:346 M:321 E: (1) "t" not allowed in RNA Sequence, NUMBER OF INVALID 't' KEYS:9  
 L:479 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
 L:483 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20  
 L:484 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

<b>SUPPLEMENTAL PRELIMINARY AMENDMENT</b>		ATTORNEY DOCKET NO. <b>70017.0027USC2</b>	
		U.S. APPLICATION SERIAL NO. <b>10/697,720</b>	CONFIRMATION NO. <b>3761</b>
		FILING DATE <b>October 29, 2003</b>	
INVENTOR(S) <b>Stanley N. COHEN et al.</b>	EXAMINER <b>not yet assigned</b>	GROUP ART UNIT <b>1642</b>	
TITLE OF APPLICATION <b>Mammalian Tumor Susceptibility Genes and Their Uses</b>			

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Supplementing the Preliminary Amendment filed October 29, 2003, and the Response to Notice to Comply and Preliminary Amendment filed on June 29, 2004, and prior to examination on the merits, please amend the above-identified application as follows:

**Amendments to the Specification** begin on page 2 of this paper.

**A current listing of the Claims** begins on page 3 of this paper.

**Remarks** begin on page 4 of this paper.

Application Serial No.: 10/697,720

**Amendments to the Specification:**

After page 46, between the specification and claims, please insert the paper copy of the Substitute Sequence Listing filed herewith, replacing the Sequence Listing previously submitted on June 29, 2004.

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

1 - 23. (Canceled)

24. (Previously Presented) A substantially purified polypeptide comprising the full length human TSG101 protein encoded by a 1494 bp cloned human cDNA insert (SEQ ID NO:3).

25. (Previously Presented) The purified polypeptide of claim 24, wherein said 1494 bp cloned human cDNA insert (SEQ ID NO:3) is deposited as ATCC Accession No. PTA-5265 in cloning vector pAMP1.

26. (Previously Presented) A substantially purified polypeptide comprising the human TSG101 protein as described by the amino acid sequence of GenBank Accession No. U82130.

27. (Previously Presented) A substantially purified polypeptide comprising the amino acid sequence of SEQ ID NO:4.

28. (Previously Presented) A composition comprising a substantially purified polypeptide of any one of claims 24-27 in conjunction with a suitable pharmaceutical carrier.

**REMARKS**

Claims 24-28 are currently pending in this application.

The specification has been amended by adding the Substitute Sequence Listing filed herewith which replaces the Substitute Sequence Listing filed June 29, 2004 containing errored sequences.

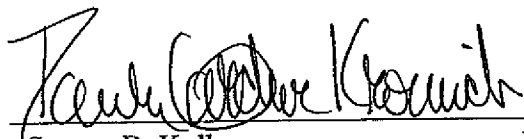
No new matter has been added.

**CONCLUSION**

Applicants respectfully submit that the present application is in condition for examination on the merits. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

MERCHANT & GOULD P.C.



Steven B. Kelber  
Registration No. 30,073

May 9, 2006

Date

P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
Telephone No. (202) 326-0300  
Facsimile No. (202) 326-0778

Dawn Gardner Krosnick  
Registration No. 44,118

**23552**

Patent & Trademark Office